

1 **Q. With reference to Hydro’s responses to IIC-NLH-017 and IIC-NLH-034:**

2 Please provide a table indicating the following for each year, by each program. In presenting the
3 annual numbers, please cover the years in the CDM potential study (i.e., to 2034, if the program
4 is relevant to that duration) and exclude results from savings arising from DSM actions that were
5 taken before 2022:

6 (a) Saved Energy (kW.h)

7 (b) Saved Capacity (kW)

8 (c) Average Electricity Rate (\$/kW.h, inclusive of demand and energy charges)

9 (d) Marginal Cost of Energy (\$/kW.h)

10 (e) Marginal Cost of Capacity (\$/kW)

11 (f) Energy Supply Cost Savings (a x d)

12 (g) Capacity Supply Cost Savings (b x e)

13 (h) Lost Revenue (a x c)

14 (i) Program Costs (\$ - Actual spend per year, not the deferred costs amortization)

15 (j) Incentives Provided to Customers

16 (k) Annual Impact on Utilities (f + g – j – i – h)

17 (l) Cumulative NPV of column k

18 The above table should be completed from the consolidated perspective of Hydro and
19 Newfoundland Power (NP), i.e., what happens to the combined finances of the utilities.

20 If Hydro is unable to produce an independent estimate of rates, please use estimated
21 unmitigated post-Muskrat rates escalated by 2.25%/year as per IIC-NLH-026.

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24 **A.** Please refer to TC-IC-NLH-003, Attachment 1.

Conservation Programs: 2021–2025 Plan
Program Estimates (2021)¹
Joint Utility Programs

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Annual Saved Energy (MWh)	Annual Saved Capacity (kW)	Average Customer Electricity Rate ² (\$/MWh)	Average Customer Demand Rate ³ (\$/kW)	Marginal Cost of Energy ⁴ (\$/MWh)	Marginal Capacity (\$/kW)	System Marginal Energy Savings (\$)	System Marginal Capacity Savings (\$)	Total Marginal System Savings (\$)	Lost Revenue (\$)	Net System Savings ⁵ (\$)	Program Cost ⁶ (\$)	Incentives Paid to Customers ⁷ (\$)	Total Utility Program Cost ⁸ (\$)	Cumulative System Benefit NPV ⁹ (\$)
							A x E	B x F	G + H	(A x C) x (B x D)	I - J	L	M	L + M	O
Insulation and Air Sealing	5,974	2,418	125	-	52	326	310,648	788,268	1,098,916	746,750	352,166	754,004	991,041	1,745,045	1,735,374
Thermostat	2,807	98	125	-	52	326	145,964	31,948	177,912	350,875	(172,963)	453,914	112,990	566,904	(2,286,475)
Isolated Systems CP ¹⁰	960	261	141	-	238	-	228,480	-	228,480	135,360	93,120	403,340	595,860	999,200	32,648
Small Technology Program	6,014	1,208	125	-	52	326	312,728	393,808	706,536	751,750	(45,214)	759,015	747,819	1,506,834	(2,219,990)
HRV ¹¹ Program	272	84	125	-	52	326	14,144	27,384	41,528	34,000	7,528	117,581	81,900	199,481	(1,437,368)
Benchmarking	14,045	1,700	125	-	52	326	730,340	554,200	1,284,540	1,755,625	(471,085)	1,022,887	-	1,022,887	(1,468,679)
Low Income ¹²	-	-	125	-	46	326	-	-	-	-	-	59,779	-	59,779	(59,779)
Isolated Systems BEP ¹³	100	21	185	14	238	-	23,800	-	23,800	18,794	5,006	35,750	35,000	70,750	(12,690)
Business Efficiency Program	6,770	1,523	87	7	52	326	352,040	496,498	848,538	599,651	248,887	1,152,626	1,057,408	2,210,035	(152,927)

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2. Average customer energy rate for customer rate classes within the sector, as per rates approved by the Board of Commissioners of Public Utilities ("Board") in Board Order No. P.U. 31(2019) AMENDED and P.U. 32(2019) and escalated at 2.25%.

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11. Heat Recovery Ventilator ("HRV").

12. Program design in 2021, launch in 2022.

13. Isolated Systems Business Efficiency Program is for custom measures and projects at commercial sites located in isolated diesel systems.

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Program Estimates (2022)¹
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							A x E	B x F	G + H	(A x C) + (B x D)	I - J	L	M	L + M	O
Insulation and Air Sealing	6,220	2,535	128	-	52	333	323,440	844,155	1,167,595	796,160	371,435	743,221	1,052,762	1,795,983	1,911,468
Thermostat	2,668	93	128	-	52	333	138,736	30,969	169,705	341,504	(171,799)	345,310	107,385	452,695	(2,129,930)
Isolated Systems CP ¹⁰	719	221	145	-	249	-	179,031	-	179,031	104,255	74,776	403,340	595,860	999,200	(249,745)
Small Technology Program	4,785	994	128	-	52	333	248,820	331,002	579,822	612,480	(32,658)	848,922	575,175	1,424,097	(1,878,073)
HRV ¹¹ Program	286	88	128	-	52	333	14,872	29,304	44,176	36,608	7,568	115,646	85,925	201,571	(132,962)
Benchmarking	14,045	1,700	128	-	52	333	730,340	566,100	1,296,440	1,797,760	(501,320)	956,505	-	956,505	(1,417,349)
Low Income ¹²	3,661	1,038	128	-	47	333	172,067	345,654	517,721	468,608	49,113	367,233	102,872	470,105	(217,302)
Isolated Systems BEP ¹³	100	21	189	15	249	-	24,900	-	24,900	19,215	5,685	35,750	35,000	70,750	(14,224)
Business Efficiency Program	7,179	1,600	89	7	52	333	373,308	532,800	906,108	650,131	255,977	1,322,768	769,091	2,091,859	73,211

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Program Estimates (2023)¹
Joint Utility Programs

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							A x E	B x F	G + H	(A x C) + (B x D)	I - J	L	M	L + M	O
Insulation and Air Sealing	6,451	2,647	130	-	46	341	296,746	902,627	1,199,373	838,650	360,743	983,243	1,113,406	2,096,649	1,776,126
Thermostat	2,537	89	130	-	46	341	116,702	30,349	147,051	329,810	(182,759)	404,909	102,085	506,994	(2,143,182)
Isolated Systems CP ¹⁰	395	122	148	-	266	-	105,070	-	105,070	58,460	46,610	403,340	595,860	999,200	(603,827)
Small Technology Program	-	-	130	-	46	341	-	-	-	-	-	-	-	-	-
HRV ¹¹ Program	300	93	130	-	46	341	13,800	31,713	45,513	39,000	6,513	163,767	90,300	254,067	(186,063)
Benchmarking	14,045	1,700	130	-	46	341	646,070	579,700	1,225,770	1,825,850	(600,080)	976,359	-	976,359	(1,542,958)
Low Income ¹²	3,661	1,038	130	-	42	341	153,762	353,958	507,720	475,930	31,790	466,541	102,872	569,413	(313,692)
Isolated Systems BEP ¹³	100	21	194	15	266	-	26,600	-	26,600	19,715	6,885	35,750	35,000	70,750	(16,443)
Business Efficiency Program	7,429	1,663	91	7	46	341	341,734	567,083	908,817	687,680	221,137	1,315,109	867,831	2,182,940	110,869

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Insulation and Air Sealing	6,726	2,767	133	-	47	350	316,122	968,450	1,284,572	894,558	390,014	854,097	1,159,347	2,013,444	2,033,415
Thermostat	2,411	84	133	-	47	350	113,317	29,400	142,717	320,663	(177,946)	431,041	97,010	528,051	(2,002,394)
Isolated Systems CP ¹⁰	285	88	151	-	272	-	77,520	-	77,520	43,035	34,485	403,340	595,860	999,200	(730,576)
Small Technology Program	-	-	133	-	47	350	-	-	-	-	-	-	-	-	-
HRV ¹¹ Program	315	97	133	-	47	350	14,805	33,950	48,755	41,895	6,860	146,049	94,850	240,899	(171,940)
Benchmarking	14,045	1,700	133	-	47	350	660,115	595,000	1,255,115	1,867,985	(612,870)	996,638	-	996,638	(1,585,783)
Low Income ¹²	2,874	822	133	-	42	350	120,708	287,700	408,408	382,242	26,166	414,235	79,872	494,107	(255,871)
Isolated Systems BEP ¹³	100	21	198	15	272	-	27,200	-	27,200	20,115	7,085	35,750	35,000	70,750	(20,105)
Business Efficiency Program	7,505	1,811	93	8	47	350	352,735	633,850	986,585	712,453	274,132	1,304,761	962,315	2,267,076	354,528

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Insulation and Air Sealing	7,007	2,890	136	-	47	358	329,329	1,034,620	1,363,949	952,952	410,997	923,548	1,207,118	2,130,666	2,042,079
Thermostat	2,292	80	136	-	47	358	107,724	28,640	136,364	311,712	(175,348)	383,141	92,215	475,356	(2,093,799)
Isolated Systems CP ¹⁰	285	88	155	-	267	-	76,095	-	76,095	44,175	31,920	403,340	595,860	999,200	(748,799)
Small Technology Program	-	-	136	-	47	358	-	-	-	-	-	-	-	-	-
HRV ¹¹ Program	330	102	136	-	47	358	15,510	36,516	52,026	44,880	7,146	145,710	99,575	245,285	(175,602)
Benchmarking	14,045	1,700	136	-	47	358	660,115	608,600	1,268,715	1,910,120	(641,405)	1,017,349	-	1,017,349	(1,628,510)
Low Income ¹²	2,874	822	136	-	43	358	123,582	294,276	417,858	390,864	26,994	494,087	79,872	573,959	(314,020)
Isolated Systems BEP ¹³	100	21	202	16	267	-	26,700	-	26,700	20,536	6,164	35,750	35,000	70,750	(24,178)
Business Efficiency Program	8,474	1,994	95	8	47	358	398,278	713,852	1,112,130	820,982	291,148	1,533,565	1,057,408	2,590,973	97,809

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